Granted September 25 1937 Class 57 a



## **AUSTRIAN PATENT OFFICE**

## Patent Specification No. 150740

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Device for Obtaining a Photographic Image from the Bird's Height Filed: October 21, 1936. - Patent effective from: April 15, 1937

Obtaining slides from the bird's height is associated with relatively high expenses, so this process cannot be performed at short notice.

The invention deals with a device for obtaining photographic images from the bird's height with the help of a balloon, wherein, a support cable is attached at one point to the ground and a stop cable is attached to another point, the other ends of which are tied up together and are secured tightly to the balloon. The support cable is used for attachment of a guide, which follows up the direction of the support cable and from which the camera is freely suspended.

Fig. 1 of the accompanying drawings schematically shows the photographing process. The support cable T is attached to the ground at point x, and the other end is attached to the balloon B. The balloon has a tendency of rising vertically 10 so as to tighten the support cable. The balloon can be fixed in the air at any desired location in the hemisphere, having a middle point x and the radius defined by the cable attached to the balloon.

In order to impart to the support cable a predetermined direction which is used a the basis for adjusting the optical axis of the photographic lens, an auxiliary or stop cable 15 is attached to the support cable at point z, whose other end is attached at point y in such a manner that the support cable is tethered in a desired inclined position.

A mounting device R is attached to the support cable and takes the direction of the support cable in such a manner than the camera is pivotally mounted in the horizontal and vertical planes like in a universal joint.

The photographic process is carried out in the following manner: After launching up the balloon B (which is positioned along the line that connects points x and y in the direction of the prevailing wind), the required pitch and roll angles of the camera are obtained. After the angular adjustment, the camera is lofted on the support cable, and the camera shutter is then electrically activated from the ground.

ig. 2 shows a device for attaching the camera to the support cable. In order to balance the wind pressure, an air inflatable shell 8 is provided at the same distance from the rotation point 5 as the camera 4, which has the same air drag as the camera mount with the camera. For this purpose, the camera mount 4 has an extension bar 3.

Fig. 3 shows a side elevation view of the device shown in Fig. 2.

## CLAIMS:

- I.A device for obtaining photographic images from the bird's height by means of a balloon, which has a support cable to which a camera is attached, characterized by the fact that a stop cable is connected to the support cable in such a manner that the balloon is positioned at a predetermined height and in a predetermined direction, which is followed up by the camera guide, in order to fix with respect to the object being taken.
- 2. The device of claim I, characterized by the fact that a camera mount has an extension beyond its suspension point and is provided with a drag body having the same air drag as the camera and positioned at the same distance from the suspension point as the camera in order to balance the wind pressure.